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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/767,422      | 01/28/2004  | Anurag K. Gupta      | CML01363H           | 4533             |

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EXAMINER

SAINT CYR, LEONARD

ART UNIT PAPER NUMBER

2626

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/767,422

Applicant(s)

GUPTA ET AL.

Examiner

Leonard Saint-Cyr

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3 – 7, 9, 11 – 15, 17, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson et al., (US PAP 2003/0167172).

As per claims 1, 9, and 17, Johnson et al., teach a method for determining when a user has ceased inputting data, the method comprising the steps of:

receiving a plurality of user inputs (multiple inputs entered; paragraph 21, lines 13 –15; paragraph 64, lines 1- 3);

determining a content of the input for each of the user inputs (“uttering direction from here to there, and the agent program fills the starting location field with here and the destination field with there”) , and determining a mode of input for each of the user inputs (filling the fields by the voice browser implies determining a voice mode of the input; paragraph 35, lines 6 - 25 )

accessing a plurality of templates from a database (uttering here to there and the voice browser fills the starting location field with here and the destination location field with there, while the graphical browser fills the starting and the destination location fields with geographical locations by the mode of a clicking point on the map, which

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implies accessing a plurality of templates from a database ; paragraph 57, lines 5-11, paragraph 35, lines 6 -20); and

determining that the user has ceased inputting data (detecting terminating sessions) if the user's inputs fill any template from the database (filling the starting location field and the destination location field with "here and there" implies filling a template; paragraph 25, lines 12 – 15, paragraph 35, lines 6- 25).

As per claims 3, 11, Johnson et al., further disclose receiving the input from the user comprises the step of receiving a multi-modal input from the user (voice browser and graphical browser; paragraph 35, lines 6 - 20).

As per claims 4, and 12, Johnson et al., further disclose that receiving a multi-modal input from the group consisting of a text input, a speech input, and a handwritten input (enter information in text mode and voice mode, handwriting recognition; paragraph 34, lines 1-3, paragraph 22, line 27).

As per claims 5, 13, and 19, Johnson et al., further disclose accessing a plurality of semantic templates ("determine the word "here" corresponds to geographical location and "there" corresponds to the geographical location" implies accessing a plurality of semantic templates, since the multimodal fusion engine determines corresponding inputs between different modalities; paragraph 35, lines 6 - 20).

As per claims 6, and 14, Johnson et al., further disclose accessing a plurality of templates (uttering here to there and the voice browser fills the starting location field with here and the destination location field with there, while the graphical browser fills the starting and the destination location fields with geographical locations by clicking point on the map, implies accessing a plurality of templates) comprising combinations of possible user inputs and their possible mode input (multiple input entered through different modalities; paragraph 37, lines 3 – 6, paragraph 64, lines 1 – 3; paragraph 35, lines 6 -20).

As per claims 7, 15, and 20, Johnson et al., further disclose dynamically updating templates (uttering here to there and the voice browser fills the starting location field with here and the destination location field with there, while the graphical browser fills the starting and the destination location fields with geographical locations by clicking point on the map, implies having a plurality of templates) from database [ the synchronization coordinator (used to forward the received information to the multimodal fusion engine), refrains from obtaining modality-specific instructions for those modalities identified to be muted, implies dynamically updating templates from database by muting specific modes; paragraph 25, paragraph 30, lines 10 – 12; paragraph 35, lines 6 -20].

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 10, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al., (US Patent 6,807,529).

As per claims 2, 10, and 18, Johnson et al., do not disclose that determining that the user has ceased inputting data if the predetermined amount time has passed. However, since Johnson et al., disclose that if a user is expected to enter both voice and text information concurrently but the multimodal fusion engine does not receive the information for fusing within a period of time, it will assume that an error has occurred (paragraph 48, lines 11- 15). One having ordinary skill in the art would have found it obvious to determine that the user has ceased inputting data if the predetermined amount time has passed within Johnson et al., method, because that would let the multimodal fusion engine allow more time to elapse for voice information to be returned than for text information (paragraph 48, lines 15 – 18).

6. Claims 8, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al., (US Patent 6,807,529) as applied to claims 7, and 15, and in view of applicant's admitted prior art.

As per claims 8, and 16, Johnson et al., further disclose dynamically updating templates based on a characteristic taken from the group consisting of available modes of input (voice browser and graphical browser), and expected response from the user (expected information to be input), and the history and the current status of the task that

the user is working on (providing information about which field has been filed by the user during a previous concurrent multimodal session state, and current state; paragraph 34, lines 20 – 23; paragraph 35, lines 6 – 11; paragraph 57, lines 5 – 12). However, Johnson et al., do not specifically teach a list of discourse obligations that constrain what the user can input in the next dialog turn.

In the same field of endeavor, applicant's admitted prior art teaches that checking discourse obligations is known and has been used in state-of-the-art dialog systems.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to consider discourse obligations list as taught by applicant's admitted prior art in Johnson et al., because that would improve the system, by predicting users' inputs.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Azvine et al., (US Patent 6,779,060) teach a multimodal user interface, wherein user inputs may be made in various different ways.

Yamagushi et al., (US Patent 6,345,111) teach a multi-modal interface apparatus and method, wherein the user input at least one medium of sound information, character information, image information and operation information through a media input selection.

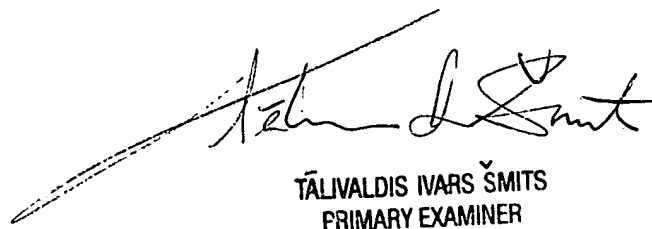
Prevost et al., (US 6,570,555) teach a method and apparatus for embodied conversational characters with multimodal input/output in an interface device.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard Saint-Cyr whose telephone number is (571) 272-4247. The examiner can normally be reached on Mon- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LS  
11/17/06



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PRIMARY EXAMINER